

REMARKS

Claims 29-36 are pending. By this Amendment, claims 10, 30, 32, and 33 are canceled, claims 1, 11, 12, 15, 29, 35, and 36 are amended, and new claims 37-50 are added. Following entry of this Amendment, nineteen (19) claims will be pending (claims 29, 31, and 34-50) of which one (1) is independent (claim 29). No new matter will be incorporated into the present application by entry of this Amendment. Rejoinder of claims 1-9 and 11-17 is respectfully requested. Applicant will consider filing a divisional application to pursue claims 18-28.

No extension fee appears to be required for entry of this Amendment. However, if the Office deems that any fees are necessary for filing this Amendment, then the Office is authorized and requested to charge such fees to Deposit Account No. 061910. The undersigned has received two copies of the first, non-final Office Action in this case. Both copies appear to be identical in substance, although they were apparently mailed on different dates. The undersigned understands the mailing date of the second copy (12 September 2003) shall apply. If this is not the case, Examiner Nguyen is respectfully requested to inform the undersigned.

Applicant's attorney and technical expert would like to thank Examiners Nguyen and Shoap for extending them the courtesy of a personal interview on 27 October 2003. This Amendment is being filed together with a recordation of the substance of the interview, in accordance with MPEP 713.04.

In the Office Action mailed 12 September 2003, the Examiner made the outstanding restriction requirement final; rejected claims 29, 30, and 32-36 under 35 U.S.C. 102(b) as being anticipated by King (1,910,296); and rejected claim 31 under 35 U.S.C. 103(a) as being unpatentable over King in view of Petri (3,707,303). Applicant respectfully disagrees with each of these rejections, with the Examiner's characterization of the invention, and with the

Examiner's characterization of the art. Applicant requests reconsideration of the rejections and restriction requirement.

The present Amendment is being filed to expedite prosecution of this case by pursuing prompt allowance of claims covering preferred embodiments. Applicant maintains that the original claims are patentably distinct over the cited art. The ensuing discussion, for example, highlights features that appear in the original claims and are patentably distinct from the cited art. Applicant reserves the right to pursue the original claims in further prosecution.

The Examiner has rejected claims 29, 30, and 32-36 under 35 U.S.C. 102(b) as being anticipated by King. The Examiner has also rejected claim 31 as under 35 U.S.C. 103(a) as being unpatentable over King in view of Petri. With respect to the rejection of claims 30, 32, and 33, the present Amendment cancels these claims and therefore the rejection of these claims is rendered moot. With respect to the rejection of claims 29, 31, and 34-36, this Amendment focuses on preferred features that are novel, and also non-obvious, over King or any combination of King, Petri, and/or the other prior art of record.

Applicant submits that the original claims define patentably over any combination of King, Petri, and/or the other prior art of record in that, inter alia, the original claims recite an elongated mount opening that is adapted to receive the claimed ball-lock insert assembly and opens through the front, workpiece-facing surface of the holder plate. The present Amendment, however, focuses on preferred embodiments wherein the mount opening extends entirely through the holder plate.

The King reference shows a blind pocket design that has several very clear drawbacks. For example, it would be unnecessarily complicated to manufacture the assembly taught by King. It is considerably more difficult to manufacture an assembly involving a blind pocket

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design than it is to manufacture an assembly wherein a through-hole is used for mounting an insert. Blind pocket designs require precise control over the depth of the pocket. Thus, for the King assembly to function properly, the shell 21, lever 14, and spring 20 all must fit operatively together between the closed end of the pocket 6 and the backing plate 40. Therefore, it is critical for the blind pocket 6 in King to be machined to a very precise depth. The drawbacks associated with blind pocket designs are explained in some detail in the Applicant's specification at page 14, lines 7-16.

The foregoing drawbacks are particularly meaningful in the context of the present invention. For example, the invention makes it very convenient for customers to purchase ball-lock inserts, provide their own holder plate, and easily machine their holder plate so it is adapted to hold tools in any arrangement they desire. In contrast, the King assembly is far from being easy to manufacture. As noted above, the blind pocket in King is an unnecessary complication. Further, in King, it is critical to machine a specific radius 16 into the closed end of the blind pocket 6. This radius 16 must match the shape of the dog-bone type lever 14 that is taught by King (see King, column 2, lines 73-77). This is another unnecessary complication. King also requires forming a small tool access bore 25 in the backing plate 40. This is yet another unnecessary complication. All of these complications can be avoided entirely by preferred embodiments of the invention wherein the mount opening extends entirely through the holder plate.

The King assembly has further disadvantages. For example, an insert mounted in a blind pocket can be difficult to remove when the insert gets jammed in the pocket. Thus, in King, deformation of the holder 4 during use would tend to cause the shell 21, lever 14, and spring 20 to become jammed stubbornly in the blind pocket 6. With the claimed design, even if the insert

were to become jammed in the mount opening, this opening extends entirely through the holder plate, such that an operator could easily push (e.g., hammer) the insert out of the mount opening. Further, forming the mount opening all the way through the holder plate facilitates providing an insert that itself defines the tool access opening 29, as can be appreciated with reference to Figure 1 of the Applicant's specification. Thus, with the claimed design, it is not necessary to form any sort of tool access opening in the holder plate.

King teaches away from any modification or combination that would result in a mount opening extending entirely through a holder plate. For example, King teaches that the back of the blind pocket 6 should be machined to have a radius that provides a seat for the rounded end of the lever 14. This teaching, of course, is not commensurate with the idea of changing the blind pocket to a through-hole. Moreover, if the blind pocket 6 in King were modified to extend all the way through the backing plate, the resulting device would not work. Rather, this would leave the shell 21, lever 14, and spring 20 unsecured against falling from the backing plate 40. Thus, any modification or combination of this nature would destroy intended function of the King assembly. It is well established that any modification that destroys the intended function of the modified apparatus cannot be obvious. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

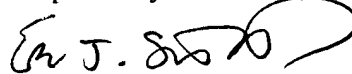
Further, Applicant submits that the present invention is clearly distinguishable over prior art designs like that taught in the noted Richard reference (1,938,44). For example, the invention allows multiple ball locks to be positioned more closely together than is possible by mounting multiple retainers adjacent one another. This is explained in detail in the Applicant's specification at page 9, line 22 through page 10, line 4. Thus, in Richard, multiple tools could not be mounted as closely together as is possible with the present invention. For example, the

tools carried by two adjacent retainers would be separated by confronting portions of the adjacent retainers. With reference to Figure 1 of Richard, it can be appreciated that the tools carried by two such adjacent retainers would be separated by (at least) twice the distance between the side of the tool 7 and the side of retainer 1. In contrast, the present invention allows ball-lock tools to be mounted much more closely together. This is perhaps best appreciated by comparing Figures 4A and 4B of the Applicant's specification. Richard also fails to disclose, among other things, the claimed insert assembly and the first and second intersecting openings in the holder plate.

Finally, new claims 37-50 cover a number of preferred embodiments of the invention. Applicant submits that these claims are patentable, not only as depending from a patentable base claim, but also in their own right.

In view of the foregoing remarks, Applicant submits that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested. The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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